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# ASIAN OPEN BILL STORK NUMBER AT KARWAR REGION SHOW A DROP.

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Abstract: This paper deals with the report of drop down number of Asian Openbill Stork (Anastomus oscitans) from different wetlands of Karwar Taluk of Uttar Kannada District Karnataka, Karwar is one the hotspots of Western Ghats of Karnataka. Openbills are a large wading migratory bird in the Stork family Ciconiidae. They usually prefer places with abundant water and snails to eat which is the preferred food of them. Anastomus oscitans like all the bird species is an ecosystem health indicator. This species can be considered as local migrants (Internal migrant). The Survey has shown that there is declined population of Asian open bill storks.

Keywords: Open bill stork, Bird population, Karwar, Quinalohis, snails

Year	Number of Birds arrived	Chicks
2023	45+	-
2022	90+	-
2021	200+	-
2020	200+	-
2019	350+	-
2018	400+	-
2017	450+	-

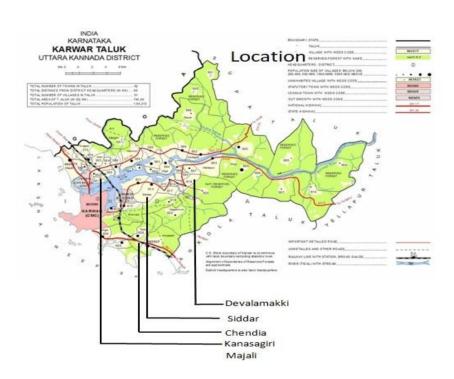
Table: Asian openbill storks for the past six years (2017-2023) from different wetlands in Karwar taluk.

The Asian openbill or Asian openbill stork (Anastomus oscitans) large wading bird in the stork family Ciconiidae. This distinctive stork is found mainly in the Indian subcontinent and Southeast Asia. It is greyish or white with glossy black wings and tail and the adults have a gap between the arched upper mandible and recurved lower mandible.

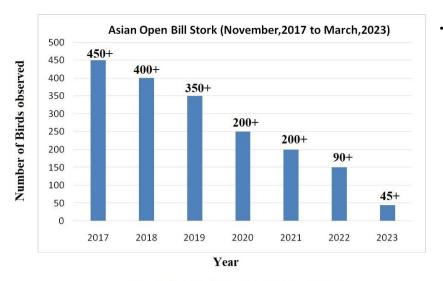
This paper deals with the study of Asian Openbill Stork from the wetlands of Karwar such as Siddar village (Near Shree Narasimha Temple ), Kinnar, Devalmakki, Sunkeri, Madibag, Kanasgiri, Majali lake and Chandiy lake. Openbills are a large wading migratory bird in the Stork family Ciconiidae. They usually prefer places with abundant water and snails to eat which is the preferred food of them.

#### INTRODUCTION

Biodiversity encompasses variety of all life forms on earth that play a great role in human exist- ence. Urbanization is a frequently cited as one of the cause of biodiversity loss (Czech and Krausman, 1997). The expansion of urban areas and the increasing demand for natural resources inevitably leads to habitat destruction. Urbaniza- tion is a pervasive and growing threat to avian populations globally, birds as indication of urban healthy condition (Pertti, 1989; Yuan & Liu, 1994).



Map: Study area map in Karwar Wetlands



**Graph showing Yearwise Bird population** 



Fig 1: Asian Openbill Stork at Siddar near Narasimha temple of Karwar Taluk



Fig 2: Asian Openbill Stork at Kanasagiri of Karwar Taluk

#### RESULTS AND DISCUSSION

Birds are often used as a biological model because they are good ecological indicators and they are easily observable (Clergeau et al., 2001). In the past, ecologists paid little attention to urban eco-systems and focused mainly on pristine ones (Blair, 2004; Collins et al., 2000; Jules, 1997; Marzluff et al., 2001; Vandermeer, 1997).

The Open bill storks were observed during November 2017 to till date. It clear from the table every year the number of bird is reduced on an average of 50(From 2017 to 2019) birds. There is drastic fall down in 2020, But the same population is observed both the years (2020 & 2021) In the current year the study team conducted survey of the open bill stork during which we found only 45 birds in entire Karwar wetlands The record of observation shows the drastic fall down in their population. The reasons being for sudden drop down in the number are:

- 1. Habitat destruction due to urbanization.
- 2. Scars in the food source availability (Majority source Snails & Crabs).
- 3. When there's no good paddy fields or marsh.
- 4. Monocrop Landscapes
- 5. Pesticides which are mainly affects to aquatic livelihoods (Pesticide: Quinalohis)
- 6. Non biodegradable waste on such wetlands.
- 7. Reduction in the mollusc species by extensive use of pesticides and chemical fertilizers in the fields are also a major threat to them. Urbanization is another major risk posed by these winged beauties. Local few communities use snails as food. Depletion of freshwater resources and pollution, human interventions are also the chief causes.

#### **CONCLUSION**

The study suggests for a further scientific studies on the declining nature of these local migrants as the birds are an excellent tool in monitoring the eco-system health. Moreover the right use of citizen science projects like eBird in monitoring the bird community, their conservation and in their habitat management. Further study is needed for the impact of Pesticide: Quinalohis on wetland birds.

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#### **REFERENCES**

http://keralamarinelife.in/Journals/Vol4-12/Journal%20ABF%20V4%20Anila%20et%20al.pdf